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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,797	06/27/2003	Chaur-Ming Shyu	33-84	6866
22653	7590	07/01/2005	EXAMINER	
EDWARD W CALLAN NO. 705 PMB 452 3830 VALLEY CENTRE DRIVE SAN DIEGO, CA 92130			VU, MINDY D	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/608,797

Applicant(s)

SHYU ET AL.

Examiner

Mindy Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/26/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This Office Action is in response to the Applicant's application filed on June 27, 2003.

#### ***Specification***

The disclosure is objected to because of the following informalities: "The neutron sources 16" on page 7 line 14 should appear to be "The neutron sources 14."

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-6, 10-12, 17-19, 22-24, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwell et al. (6,657,189) in view of Proctor et al. (4,694,165).

With respect to Claim 1, 12, and 19, Atwell et al. discloses a set of calibration/reference standard components and a method of calibrating and/or validating the calibration of a material analyzer having a measurement region and measurement apparatus for measuring properties of a material specimen occupying a given portion of

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the measurement region while the material specimen is transported through the measurement region in a given direction (Col. 4 lines 1-15), comprising the steps of:

(a) placing a calibration/reference standard of known chemical composition (Col. 5 lines 26-29) within the measurement region of the analyzer to simulate the occupancy of the given portion of the measurement region by the material specimen (Col. 6 lines 4-6);

(b) making measurements with the measurement apparatus of the analyzer while the calibration/reference standard is within the measurement region (Col. 6 lines 14-19); and

(c) calibrating or validating the calibration of the measurement apparatus in accordance with said measurements (Col. 4 lines 1-4);

wherein step (a) comprises the step of:

(d) positioning within the measurement region a set of elongated (Col. 5 lines 57-58) calibration/reference standard components that are individually packaged for being so combined with each other as to simulate the occupancy within the given portion of the measurement region by the material specimen, and are further individually packaged for unaided handling of individual said components by one or two persons with the individually packaged components being positioned within the measurement region so that their respective longitudinal axes are approximately aligned with the direction in which the material specimen is transported through the measurement region (Col. 5 lines 25-38).

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Atwell et al. does not disclose expressly describe a set of components that are individually packaged in a hard shell. Proctor et al. discloses a process of manufacturing a calibration block in the shell (Col. 9 lines 44-58). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to package in a hard shell for easier handling and stacking purposes.

With respect to Claims 4 and 22, Atwell et al. discloses wherein step (d) comprises the step of: (e) disposing individually packaged calibration/reference standard components of different lateral dimensions in combination with each other to simulate the occupancy of the measurement region by the material specimen during the measurement of the properties of the material specimen (Col. 15 lines 6-15). Atwell et al. discloses the packages could be different sizes.

With respect to Claims 5 and 24, Atwell et al. discloses wherein step (d) comprises the step of: (e) disposing individually packaged calibration/reference standard components (Col. 12 lines 63-65) of respectively different chemical composition in combination with each other to simulate the chemical composition of the material specimen.

With respect to Claims 6 and 23, Atwell et al. discloses the size of each unit standards is dimensioned such that they can be easily stacked and configured to approximately duplicate actual conditions of materials to be analyzed (Col. 5 lines 39-

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41) and two more sets of unit standards having a different chemistry are utilized (Col. 15 lines 6-15). Therefore, the individually packaged components could have different lateral dimensions and respectively different chemical compositions.

With respect to Claims 10, 17 and 28, Atwell et al. discloses the physical shape of the unit standard could be any shape (Col. 5 lines 56-58). Therefore, the individual shells could be tubular and disposed within the measurement region so that the respective portions of approximately uniform lateral dimensions were disposed within the measurement region (Col. 5 lines 35-45).

With respect to Claims 11, 18 and 29, Atwell et al. discloses the individually packaged calibration/reference standard components are packaged for unaided handling by one person (Col. 5 lines 35-37).

Claims 2, 3, 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwell et al. (6,657,189) in view of Proctor et al. (4,694,165) and further in view of Tiramani et al. (6,415,920).

With respect to Claims 2, 13, and 20, Atwell et al. and Proctor et al. disclose the individual shells but lack wherein gripping means are attached to at least one end of the individual shells. Tiramani et al. discloses a strap may be attached to the end of the shell (Col. 8 lines 1-15). It would have been obvious to one of ordinary skill in the art at

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the time of the invention was made to modify the individual shells with the strap for ease of carrying.

With respect to Claim 3, Proctor et al. further discloses the individual shells are longer than the dimension of the measurement region (Col. 10 lines 58- 68) in the direction in which the material specimen is transported through the measurement region. When the shell is longer than the dimension of the measurement region and a strap is at the end of the shell, it can be inserted in a way that the gripping part is not within the measurement region.

Claims 7-8, 14-15, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwell et al. (6,657,189) in view of Proctor et al. (4,694,165) and further in view of Salpeter (5,550,053).

Atwell et al. and Proctor et al. disclose the individual package of the calibration/reference standard components and lack each package displays a color code indicating the chemical composition of the respective standard component. Salpeter discloses a method of calibrating wherein the tubes are color coded to identify the reagent or solution (Col. 3 lines 37-41). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to color code the end of each package where common exterior locations are so that respective color codes for all of components are visible from a single location for recognition purposes when many packages are presented in one location.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atwell et al. (6,657,189) in view of Proctor et al. (4,694,165) in view of Salpeter (5,550,053) as applied to claim 14 above, and further in view of Tiramani (6,415,920).

Proctor et al. discloses the individual shells are longer than the given dimension of the measurement region in the direction in which the material specimen is transported through the measurement region and lacks gripping means attached to at least one end of the individual shells can be disposed outside the measurement region. Tiramani et al. discloses a strap may be attached to the end of the shell (Col. 8 lines 1-15). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the individual shells with the gripping means attached to an end of the individual shell for handling purposes.

Claims 9, 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwell et al. (6,657,189) in view of Proctor et al. (4,694,165) and further in view of Harada et al. (6,077,118).

Atwell et al. and Proctor et al. disclose the individual shells and the longitudinal extent of the standard component of said known chemical composition packaged therein are longer than a given dimension of the measurement region in the direction in which the material specimen is transported through the measurement region and lack the individual shells include a filler material disposed between the standard component of known chemical composition and at least one end of the shell. Harada et al. discloses a filler material to fill in the gaps of the shell (Col. 3 lines 61-65). It would have been



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obvious to one of ordinary skill in the art at the time of the invention was made to fill the extent part of the shell with filler material so that only the known chemical composition extend throughout the given dimension of the measurement region for the purposes of accurate calibration.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mindy Vu whose telephone number is 571-272-8539. The examiner can normally be reached on M-F 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mv

  
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